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HQ 123 (01/11)

Mobile Video Surveillance System Operational Requirements Document
OIT Review

OTIA requested OIT's review of the Mobile Video Surveillance System (MVSS) Operational Requirements Document (ORD). The document was sent to the Chief Technology Officer (CTO), Enterprise Networks and Technology Support (ENTS), Field Support, Enterprise Data Management and Engineering (EDME), and Wireless Systems Program Office (WSPO) for review. Their comments are as follows:

CTO:

- No comments

ENTS:

- No comments

Field Support:

- There needs to be an assessment of the staffing support requirements and associated funding requirements. These requirements are necessary to identify life-cycle costs and should have been identified in the business case.

- In Section 2.1, Operational Requirements (pg. 9), the real-time replay requirements, data retention, and extrapolation need to be better defined to ensure the operator is fully supported. These requirements are currently at a high level but there may be higher-level Federal governance related to litigation (Code of Federal Regulations or eDiscovery requirements for litigation) and data retention (National Archives and Records Administration) to consider. Further, there is a requirement for data analysis. This paragraph needs to be more detailed to evaluate the need for a third party application to better enable the user to support the mission (i.e. (b) (7)(E) s, etc.).

- Is the capability to monitor (b) (7)(E) s only required locally, or does that requirement need to be supported remotely?

- The Integrated Logistics Support Plan (ILSP) needs to address the following:
  - Who will be doing the Operational Analysis against the Key Performance Parameters (KPP) to determine if the investment meets the performance goals? (see pg. 15,first paragraph)
  - More details are required on the Maintenance and Support. For example, spare parts stocking, how will cannibalization be authorized, and the Maintenance Plan (O, possibly Intermediate (I), and D) must be a deliverable. These factors will impact the System or Materiel Availability (Am) of (b) (7)(E) .

- The requirements allow for interchangeability between vehicles. How will we maintain configuration control? There needs to be a comprehensive Configuration Control

System/Process that integrates with Maintenance Planning to ensure we can track equipment maintenance and materiel performance.

- Field Support training needs to be identified and provided prior to deployment. This document identifies that Field Support will need to be capable of transferring the MVSS (b) (7)(E) . This operation will require the use of (b) (7)(E) safety, forklift drivers) which will need to be pre-staged.

- The System or Materiel Availability (Am) is required to be between (b) (7)(E) There is no mention of the availability assessment excluding a spare parts wait time, off-hours exclusion, or MVSS transport time. This needs to be clarified since Field Support is not staffed 24/7 and the spare part support methodology does not forward deploy all spares. Depending on the customer requirements, this could potentially have a significant OIT operational and staffing increase.

- Section 2.3.1 states on page 14 that "Field Support will troubleshoot the mission critical failure(s) down to the LRU [Line Replaceable Unit]". However, LRU replacement will normally occur at the USBP/CBP maintenance facility. Recommend that this be changed to "LRU replacement will occur at the USBP/CBP maintenance facility."

- Section 2.3.1, second paragraph on page 15 must be better defined. The current MVSS systems are transported to CBP maintenance facilities to reduce maintenance efforts. The responsibility for transporting 4x4 vehicles that fail in the field should be the responsibility of the OBP garage and not Field Support.

- Section 2.3.1, third paragraph on page 15 needs to define what (b) (7)(E) can be replaced by agents (i.e. (b) (7)(E) .

- Section 2.3.2, second paragraph (pg. 15) – Who will develop the maintenance training for OIT? OTD develops operator training only.

- MVSSORD 12 (pg. 18) – Recommend changing the rationale to read "... (b) (7)(E)

- MVSSORD 27 (pg. 21) – The rationale statement needs to be clarified, and the second sentence corrected for grammar. The only required (b) (7)(E) (b) (7)(E)

EDME:

- MVSSORD 01 (pg. 16) states that the surveillance range will be (b) (7)(E) The stated current capability is (b) (7)(E). Why is it limited to (b) (7)(E) currently?Is it due to (b) (7)(E) restrictions or other limitations that a new system will also be effected by?

- MVSSORD 02, 03, 07, 08, 09 and 10 (pg. 16-18) use the term "video of sufficient quality and resolution," which is subjective even with the explanatory footnote (12). For an Analysis of Alternatives (AoA), the quality and resolution need to be specific, assuming quality can be quantified.

- MVSSORD 18 (pg. 19) states that the MVSS will have the capability to (b) (7)(E) a selected IoI [Item of Interest]." What technology is being implied?

- MVSSORD 19 (pg. 19-20) states that the system "shall continuously timestamp, record, and store all MVSS video… and associated metadata… for a minimum of (b) (7)(E) (O)." It is unclear whether the minimums apply to everything – e.g., recording and storing or just storing. This may need to be two requirements.

- MVSSORD 22 (pg. 20) states that stored data can be retrieved in CBP-compatible formats. Specific formats will need to be identified for the AoA.

- MVSSORD 23 (pg. 20-21) states that the MVSS shall not degrade or interfere with the operation of other CBP equipment. The AoA will need to take this into consideration and determine what equipment could be affected.

- MVSSORD 25 (pg. 21) states that the MVSS shall operate in (b) (7)(E) .

- MVSSORD 27 (pg. 21) will place a dependency on the vehicle. The selected vehicle must be able to support the (b) (7)(E) and its normal operation.

- MVSSORD 30 (pg. 22) states that the MVSS shall be capable of being (b) (7)(E) It is unclear what is required.

- MVSSORG 40 (pg. 24) is a dependent on MVSSORD 01.

- MVSSORD 40, 41, and 42 (pg. 24-25) concern environmental conditions. Since different locations may have different environmental conditions, will one AoA apply to all based on worst case, or will multiple AoAs be conducted based on location?

- MVSSORD 43 (pg. 25) states basically that no training shall be required. The ORD should probably be more specific as to the skill sets currently required of agents for purposes of the AoA.

WSPO:

- MVSSORD 12 (pg. 18) refers to the MVSS (b) (7)(E) In addition to the section 4.1 design requirements that the MVSS system must be compatible with (b) (7)(E) other existing CBP equipment used in its proximity, such as (b) (7)(E) , the MVSS solution needs to preserve any (b) (7)(E)

(b) (7)(E)

- MVSSORD 32 (pg. 22) states that "The system shall have a materiel availability (Am) equal to or greater than (b) (7)(E) where Am is defined as system uptime divided by the sum of system uptime and system downtime. (KPP)" This is unclear because of the use of "materiel availability (Am)." This is not an operational readiness metric (such as Operational Availability (AO)). This is especially unclear as the rationale talks to operating time and operational requirements. (See DoD, Reliability, Availability, Maintainability, and Cost Rationale Report Manual. http: (b) (7)(E) (b) (7)(E) If limited quantities of the MVSS are anticipated, we suggest keeping the Am metric,but adding an operational readiness metric (such as AO), since Materiel Availability is a measure of the percentage of the total inventory of a system operationally capable (ready for tasking) of performing an assigned mission at a given time, based on materiel condition.Suggest adding an AO of (b) (7)(E)

U.S. Customs and Border Protection

MOBILE VIDEO SURVEILLANCE SYSTEM

OPERATIONAL REQUIREMENTS DOCUMENT FOR UNITED STATES BORDER PATROL

DOCUMENT NO: OTIA05-MVSS-00-00001

Initial Release, 20 March, 2012

DEVELOPED BY:

OPERATIONAL INTEGRATION AND ANALYSIS DIRECTORATE (OIAD)
OFFICE OF TECHNOLOGY INNOVATION & ACQUISITION (OTIA)

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Joint Requirements Council Date
Department of Homeland Security

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Acquisition Decision Authority, DHS

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EXECUTIVE SUMMARY

The Department of Homeland Security (DHS) is charged with managing, securing, and controlling the Nation's borders with a priority mission focus of preventing terrorists and terrorist weapons from entering the United States. U.S. Customs and Border Protection (CBP) represent the front line in the security of our Nation's borders. The United States Border Patrol (USBP) is tasked with the responsibility of securing the Nation's borders against the illegal entry of people and goods between Ports of Entry (POE). While the ultimate goal is deterrence, USBP uses a mix of infrastructure, technology, and personnel to effectively manage the border. These resources are used to execute the mission functions of predicting illicit activity, detecting and tracking border crossings, identifying and classifying the detections, and responding to and resolving suspected border incursions.

The October 2006 Secure Border Initiative (SBI) Mission Need Statement (MNS) identified a number of capability gaps that impact USBP's ability to execute its mission. More recently, a DHS-directed Analysis of Alternatives (AoA) re-validated those mission gaps. The resulting Arizona Border Surveillance Technology Plan (ATP) identifies a number of mature technologies to be deployed in accordance with local operational needs and constraints to help fill those gaps. One of the technology approaches within that plan is to deploy additional Mobile Video Surveillance Systems (MVSS). These systems enable the detection, tracking, identification and classification of illegal border incursions. While legacy MVSS have performed relatively well, shortfalls in both effectiveness and suitability have generated a requirement for an enhanced, (b) (7)(E) with day/night surveillance capability. Initial deployment will be limited to the Arizona border.

This document defines the operational requirements for MVSS and provides the following information:

- Section 1: Restates the applicable mission needs and gaps, provides background regarding the MVSS, and discusses initial and final operational capabilities.
- Section 2: Discusses the CBP mission functions and how MVSS supports those functions, provides a high level summary of the concept of operations, and defines the high level operational requirements for the MVSS.
- Section 3: Defines the effectiveness requirements for MVSS.
- Section 4: Defines the suitability requirements for the MVSS.
- Section 5: Summarizes the MVSS Key Performance Parameters (KPP).

To execute the ATP and provide a mobile surveillance capability at designated geographical locations by the end of 1st Quarter Fiscal Year (FY) 2013, CBP is seeking non-developmental items (NDI), Commercially-available Off-the-Shelf (COTS) or Government Off-the-Shelf

(GOTS) solutions. Because NDI/COTS/GOTS may not meet all operational requirements, Table 4, located in Appendix 2, prioritizes the requirements to facilitate cost-effectiveness and schedule tradeoffs. In accordance with DHS Acquisition Directive 102-01, deviations to the operational requirements will be coordinated with the appropriate stakeholders as described in Appendix 2.

REVISION HISTORY

Revision	Date	Reference (Table, Figure, or Paragraph Sections)	Brief Description of Change
Initial Release	3/20/12		

1 INTRODUCTION

1.1 PURPOSE

DHS is charged with managing, securing, and controlling the Nation's borders with a priority mission focus of preventing terrorists and terrorist weapons from entering the United States. CBP represents the front line in the security of our Nation's borders. CBP's activities are organized into three mission sets: (1) Securing America's Borders; (2) Securing and Expediting the Movement of People and the Flow of Goods; and (3) Sustaining Investment in its People and Capabilities.[1] These mission sets align with the DHS Quadrennial Homeland Security Review (QHSR) Report's *Mission 2: Securing and Managing Our Borders.*[2] USBP has the responsibility of securing the Nation's borders against the illegal entry of people and goods between POE. To accomplish this, USBP uses a mix of infrastructure, technology, and personnel to manage the border. These three resources are used to execute the mission functions of predicting illicit activity, detecting and tracking illegal border crossings, identifying and classifying the detections, and responding to and resolving suspect border incursions.

To efficiently and effectively manage the Nation's borders, USBP requires 1) Visibility and Surveillance, 2) Command, Control, Communication, Coordination, and Intelligence (C4I), and 3) Support and Sustainment capabilities.[3] Each capability enhances overall situational awareness and, when coupled with the right mix of manpower and tactical infrastructure, increase operational effectiveness to counter a dynamic and evolving border threat. However, critical gaps in these capabilities were articulated in the October 2006 SBI MNS:

1. Detection and tracking;
2. Identification and classification; and
3. Situational awareness and a common operating picture.

These capability gaps were re-validated in a recent DHS directed AoA. The resultant ATP used the results of the AoA in concert with key operational inputs to determine the most effective technology lay-down and tailored deployment of stand-alone, non-developmental (and ideally commercial)(b) (7)(E) .

Within the new technology plan, one of the stand-alone systems will be MVSS. Since the acquisition strategy is to procure NDI, COTS, or GOTS systems, CBP will select a product from among industry's offerings that represents the optimal balance among performance, cost, and schedule. This Operational Requirements Document (ORD), therefore, provides a prioritized

[1] CBP's Missions, Goals, and Priorities, FY2011-2013
[2] Department of Homeland Security Quadrennial Homeland Security Review Report: A Strategic Framework For A Secure Homeland, dated February 2010
[3] These Foundational Operational Capabilities are defined in the USBP Operational Requirements-Based Budget Process Tool.

framework for tradeoffs but it does not represent (nor is it intended to represent) a firm set of requirements that must be met by the eventual MVSS. In fact, this ORD will be supplemented to record and reflect the final acquisition decision that results from the trade-offs. Specifically, MVSS will be a "capability-based" procurement.

1.2 BACKGROUND

Currently, USBP owns and operates a fleet of approximately (b) (7)(E) MVSS deployed along the border in urban, rural, and remote areas to enable the detection, tracking, identification, and classification of illegal incursions in areas t(b) (7)(E) e Within that legacy fleet, there are many different configurations of MVSS; however, the most common include(b) (7)(E) n dedicated USBP 4x4 vehicles. The systems are controlled and monitored by an operator from within the vehicle. Agents in the surrounding area respond to traffic that is detected by the MVSS operator.

While the legacy systems provide operational effectiveness, the current fleet suffers from several deficiencies. First, the number of systems in CBP's inventory is insufficient to address the operational needs across the Arizona border. Second, many of the systems are reaching obsolescence and are incapable of providing sufficient video quality at the required surveillance ranges. Finally, the excessive number of legacy configurations presents logistics support challenges and unsustainable maintenance costs. As a result, USBP needs an enhanced(b) (7)(E) r, that will provide medium-range surveillance in accordance with USBP's daily operational needs.

While USBP agents typically include the transport vehicle when they refer to MVSS, for the purposes of this requirements document, the MVSS requirements refer to four subsystems: a) surveillance, b) operator interface display and control, c) elevation, and d) power. The 4x4 vehicles that the system is installed in are considered government furnished equipment for the upcoming procurement. As a result, the vehicle itself is not included in the MVSS[4] requirements described in this document.

1.3 INITIAL OPERATIONAL CAPABILITY AND TIMELINE

Initial Operational Capability (IOC) consists of four systems to be deployed in accordance with the ATP. The timeline for delivery of the systems is 1st Quarter FY 2013. CBP is seeking NDI/COTS/GOTS for IOC. Because it is unlikely that NDI/COTS/GOTS can meet all requirements in Sections 3 and 4, USBP has prioritized the requirements in Appendix 2 to facilitate cost-effectiveness and schedule tradeoffs.

While IOC is currently limited to the Arizona border, the operational requirements contained in this document also consider environments along the remainder of the Southwest border given the likelihood that MVSS will be required beyond Arizona. That said, the primary focus of the

[4] Unless otherwise specified as legacy, the term MVSS refers to the enhanced MVSS throughout the remainder of this document.

Arizona deployment will be (b) (7)(E) s should be considered for deployments beyond Arizona.

1.4 Full Operational Capability and Timeline

The number of systems to support a Full Operational Capability (FOC) is to be determined pending the results of the Phase IB and Phase II of the AoA results.

2 MISSION REQUIREMENTS

Objective 1.1 in CBP's FY 2009-2014 Strategic Plan states that CBP must: "*Establish and maintain effective control of air, land, and maritime borders through the use of the appropriate mix of infrastructure, technology and personnel. A segment of the border between ports of entry is considered under effective control when CBP can simultaneously and consistently achieve the following: (1) detect illegal entries into the United States; (2) identify and classify these entries to determine the level of threat involved; (3) efficiently and effectively respond to these entries; and (4) bring each event to a satisfactory law enforcement resolution.*"

CBP key mission elements are defined below in Table 1:

Table 1: CBP Mission Elements

Mission Element	Definition
(b) (7)(E)	es
(b) (7)(E)	

To successfully execute these mission elements, USBP requires a number of capabilities that include:

- Visibility and Surveillance Capability: the ability to detect, track, identify and classify border incursions at all times and in all weather, terrain, vegetation and lighting conditions. [5]

- C4I Capability: the ability to collect and analyze information, exchange information and intelligence, allocate and control resources according to operational needs, and make informed operational command decisions in support of the mission. [6]

- Support and Sustainment Capabilities: the ability to operate, maintain, and sustain the surveillance systems in accordance with mission needs and operational requirements.

Visibility and Surveillance is a critical capability needed to manage urban, rural, and remote areas of interest (AoI)[7] exploited by IoI threats. USBP requires scalable, mobile response capabilities that provide the flexibility and agility to predict and rapidly respond to changes in risk along the border. Historical data demonstrate that border threats adapt quickly to counter CBP operations. In order to maintain a flexible and adaptable operational posture, USBP leverages mobile surveillance capabilities to the greatest extent possible. Each MVSS provides a medium-range surveillance capability that can be deployed wherever the 4x4 vehicles can safely maneuver. MVSS are normally deployed (b) (7)(E) to provide surveillance according to (b) (7)(E) that indicates IoIs are in or approaching an area. MVSS are also deployed to (b) (7)(E) (b) (7)(E) (b) (7)(E)

An MVSS enables USBP to monitor an area of coverage (AoC)[8] within an AoI more efficiently and is the preferred solution in certain urban, rural, and remote areas (b) (7)(E) (b) (7)(E) As one part of a multi-layered approach to border surveillance, MVSS will contribute to both the Visibility and Surveillance, C4I, and Support and Sustainment capabilities needed by USBP. The systems will help focus operational efforts and enhance agent safety and situational awareness.

[5] This is a USBP Foundational Operational Capability defined in the USBP Operational Requirements-Based Budget Process Tool.

[6] This is a USBP Foundational Operational Capability defined in the USBP Operational Requirements-Based Budget Process Tool.

[7] An AoI is defined as a targeted area within a USBP Station's Area of Responsibility (AoR) that requires surveillance due to the risk level associated with the border threat exploitation. Note: there may be more than one AoI within an AoR.

[8] Area of Coverage (AoC): The resulting areas, considering installation location, (b) (7)(E) (b) (7)(E) within which USBP can successfully conduct surveillance activities using the system. When used in a broader context, AoC can also refer to the coverage provided by a combination of surveillance systems. Ideally, the AoC is approximately equal to the AoI.

2.1 OPERATIONAL REQUIREMENTS

USBP requires the capability to continuously monitor a targeted AoC. MVSS shall enable the detection, tracking, identification, and classification of all traffic as follows:

- Enable the operator to quickly deploy/redeploy the surveillance system according to (b) (7)(E) and daily operational needs;
- Provide a(b) (7)(E) d ;
- Display video in near real-time[9] at the operator interface;
- Enable operator detection and tracking of IoIs within an AoC;
- Enable operator identification to determine whether IoIs are(b) (7)(E) r ;
- Enable operator classification to determine whether IoIs are engaged in suspect activities, present a potential threat to an investigating border patrol agent (BPA), and the associated level of threat(b) (7)(E) e .
- Enable near real-time operator control of elevation and surveillance subsystems to track IoI within the AoC;
- Enable near real-time replay and video analysis to support detection, tracking, identification, and classification;
- Provide capability for data recording and extraction to support external post-event data analysis and sharing;
- Provide capability to c(b) (7)(E) t ;
- Provide capability to(b) (7)(E) d
- Perform the operational requirements listed above reliably in urban, rural, and remote environments where access is limited and in all weather conditions (including adverse and extreme) encountered along the U.S. Southwest border.

These high level operational needs are further defined in terms of operational requirements in Sections 3 and 4. Table 4 in Appendix 2 summarizes these operational requirements and provides traceability to the mission elements and capabilities.

[9] Near real-time is defined as an extremely low-latency delay(b) (7)(E) . Low latency is essential to successful operation of the system and more importantly agent safety.

2.2 CONCEPT OF OPERATION

Figure 1 below illustrates notionally how USBP employs a layered, defense-in-depth surveillance approach to manage the border between POEs. This layered technology approach will augment fixed surveillance capabilities such as (b) (7)(E)) and Integrated Fixed Towers (IFT) with mobile surveillance capabilities such as Mobile Surveillance Systems (MSS) and MVSS. The Arizona Border Surveillance Technology Plan Concept of Operations document provides additional details on this layered approach and the employment of each alternative shown in Figure 1. Specific technology implementations are tailored for each individual environment along the Southwest border based on factors such as threat, terrain/topography (flat/rugged/maritime), weather (visibility, winds, etc.), human development (urban, rural, and remote), operational considerations, and tactics, etc.

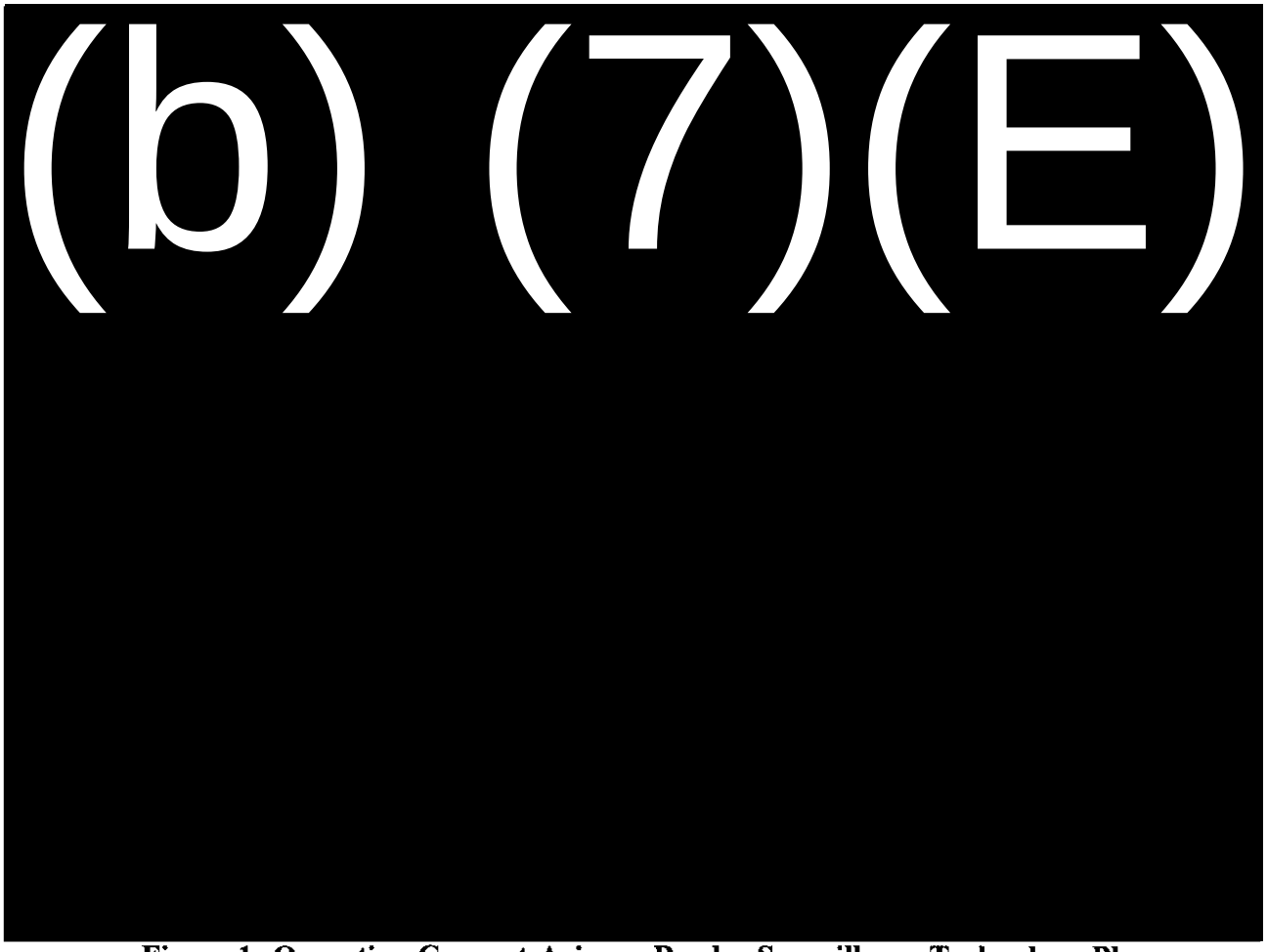


Figure 1: Operating Concept-Arizona Border Surveillance Technology Plan

Figure 2 provides a high level concept of operation for MVSS. Each MVSS will be responsible for monitoring its AoC that is comprised of the instantaneous field of view (FoV)[10] and the total

[10] Field of view (FoV): The horizontal and vertical angles visible by or through a (b) (7)(E) at any specific instant.

field of regard (FoR).[11] Each MVSS will consist of four subsystems: an operator interface display and control subsystem, a surveillance subsystem, an elevation subsystem, and a power subsystem (independent from the transport vehicle). The operator interface display and control subsystem (b) (7)(E) . It will provide operator control of the other subsystems and tools (b) (7)(E)) which are designed to aid the operator to more efficiently operate the system. If necessary, the operator will perform MVSS subsystem initiation prior to moving the vehicle so the(b) (7)(E) g The operator will be responsible for monitoring and controlling the MVSS subsystems and redeploying the MVSS when the situation dictates (e.g., (b) (7)(E) .

(b) (7)(E) l . The number of MVSS deployed within each USBP sector will vary based on geography, availability of equipment and trained operators, and operational need. Where deployed, the system will provide the MVSS operator with video of sufficient quality and resolution to enable the detection, tracking, identification, and classification of an IoI. The MVSS will also provide IoI (b) (7)(E) r .

The MVSS may be deployed in areas of operations where BPAs may experience(b) (7)(E) t . As depicted in Figure 2, the MVSS will (b) (7)(E) a

(b) (7)(E)

Figure 2: MVSS High Level Operational Concept

[11] Field of regard (FoR): The total angular area through which the(b) (7)(E) n direct its field of view.

Each MVSS will accomplish the following tasks:

- (b) (7)(E) ;
- Provide video to the operator (b) (7)(E) ;
- Enable operator (b) (7)(E) ;
- Enable operator (b) (7)(E) ;
- Enable identification of an IoI as (b) (7)(E) ;
- Provide (b) (7)(E) ;
- Provide IoI (b) (7)(E) ;
- Allow operator control of all system functions;
- Allow (b) (7)(E) ;
- (b) (7)(E) ;
- Record system data for later retrieval;
- Enable the export of recorded data; and
- Provide immediate replay capability to support current operations such as studying video for identification and classification.

An MVSS operator will accomplish the following tasks with the system:

- Perform MVSS (b) (7)(E) ;
- Conduct vehicle and MVSS health system inspection (preventive maintenance) checks prior to deployment;
- Deploy/redeploy the system to urban, rural, and remote sites in 4x4 vehicles via (b) (7)(E) as daily operational needs dictate;
- Direct and adjust the FoV as necessary to monitor the AoC for IoIs;
- Monitor video via the operator interface for IoIs;
- Prioritize IoI detections for further investigation;

- Identify IoIs as (b) (7)(E) ;
- Classify IoIs to determine level of threat (b) (7)(E) e)
- Communicate threat data to BPAs for situational awareness and response ((b) (7)(E) e ;
- Command the system to (b) (7)(E) ;
- Disposition the IoI, including filing of any required reports and log entries, annotation and archiving of selected imagery, etc;
- Command the system to transition to a transportable state; and

2.2.1 Climate

The climate along the Southwest border is described in the Secure Border Initiative (SBI) Design Reference Mission (DRM), Version 1.0, May 2010.

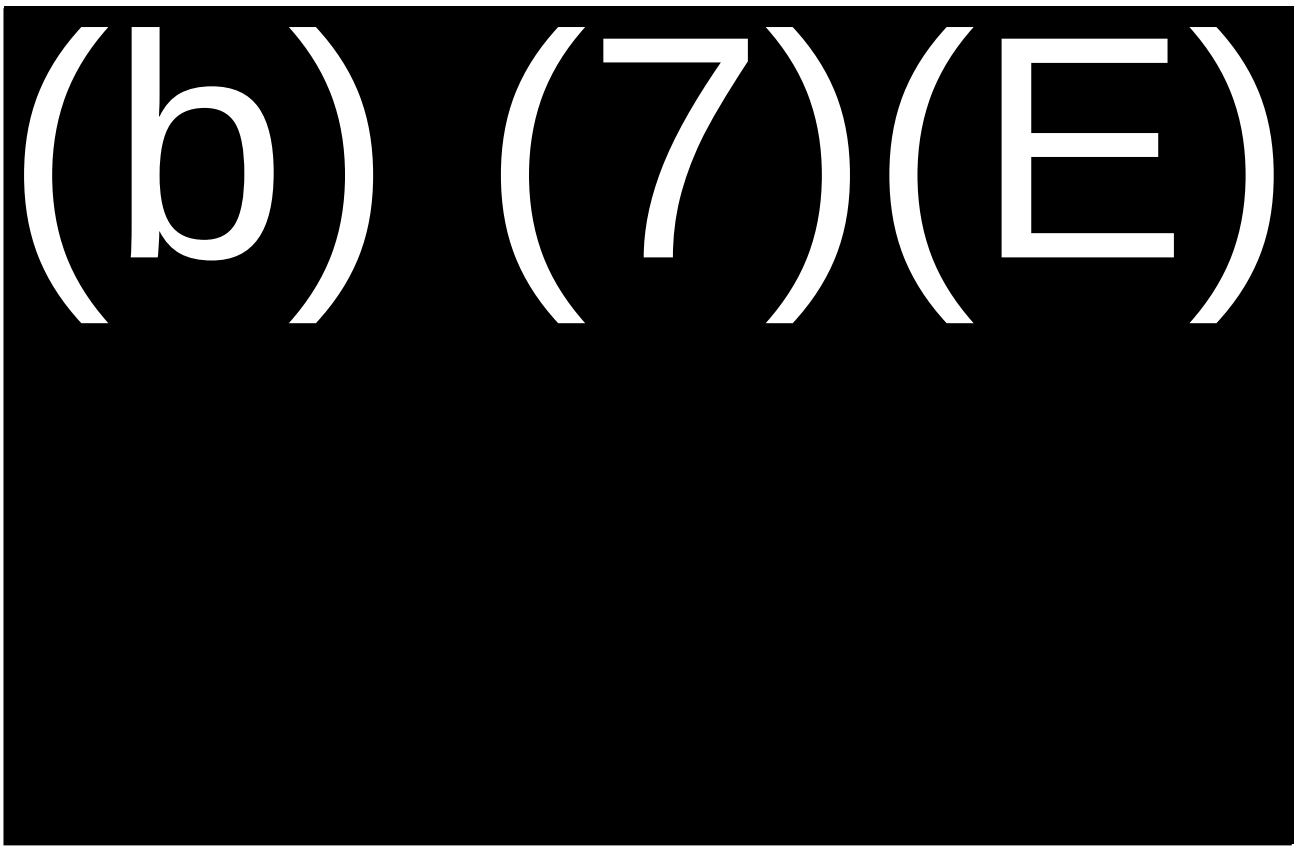
2.2.2 Operational Scenarios

The following scenario describes how USBP will use the MVSS to execute their mission.

2.2.2.1 Scenario 1

(b) (7)(E)

(b) (7)(E)



2.3 CONCEPT OF SUPPORT

2.3.1 MAINTENANCE AND SUPPORT

The MVSS must be capable of performing mission critical functions in support of USBP operations, which are on-going 24 hours a day. This requires a highly reliable and low maintenance system. The system(b) (7)(E)

Critical failures include any failure condition that prevents the system from performing/enabling detection, tracking, identification, and classification functions. Upon notification of a mission critical failure, the MVSS operator may assess the available health and status information and, if possible, apply corrective action such as a(b) (7)(E) . When the repair requires a higher level of maintenance, the operator will notify the supervisor of the fault(s). The supervisor will notify Field Support of the faults, and, once the MVSS arrives back at the station, Field Support will troubleshoot the mission critical failure(s) down to the LRU. LRU replacement will normally occur at the USBP/CBP maintenance facility. Depending on the system design and implementation, LRUs may include, for example, the(b) (7)(E) . Unserviceable LRUs will be returned to the designated depot for repair. Detailed information on maintenance and support will be documented in the Integrated Logistics Support Plan.

The maintenance and logistics support approach should ensure the continued capability and availability of the surveillance systems at the best cost through Operational Analysis. Each Operational Analysis should assess compliance with all KPPs to determine if the investment continues to meet performance goals. To this end, appropriate technical measures must be recorded to assess materiel availability (system uptime divided by the sum of system uptime and system downtime), mean time between critical failures and any other metrics identified for planning ongoing and future operations and maintenance.

A minimum of two levels of maintenance is necessary to support the system – operational level and depot level. Field Support personnel will be required to conduct both preventive and corrective maintenance at the operational level, either in the field or at the applicable CBP/USBP facility where the systems are deployed. If the 4x4 transport vehicle fails and cannot be rapidly returned to operation, Field Support also has the responsibility of transferring the MVSS to another vehicle.

USBP agents will be expected to conduct very limited troubleshooting activities, such as (b) (7)(E) Under certain conditions, USBP operators may also be expected to perform limited scheduled maintenance in the field, such as (b) (7)(E) t, provided it does not require any special tools or skills outside of standard operator training. (b) (7)(E) Depot level maintenance will be necessary for those corrective actions that cannot be done at the operational level.

2.3.2 TRAINING

All personnel who operate or support the system will require initial training as well as periodic training in applicable written and on-line formats. USBP will be responsible for projecting initial training requirements based upon initial deployment. Train-the-Trainer (T3) courses will be developed using CBP Training Development Standards. The designated Master Trainers will be responsible for training other CBP operators on the use, deployment, and preventive maintenance checks and services of the MVSS. Once initial T3 training is completed, it will be the local BP station's responsibility to conduct follow-on and attrition training to USBP personnel.

An appropriate number of personnel identified by CBP will be trained in locations that align with system deployment localities. The Office of Information and Technology (OIT) will be responsible for projecting training requirements for Field Support personnel that will perform maintenance once the warranty expires.

3 EFFECTIVENESS REQUIREMENTS

The following requirements describe the MVSS performance attributes that support the Visibility and Surveillance and C4I capabilities. Thresholds (T) and objectives (O) are defined where applicable, and KPPs are highlighted in bold. The term "shall" reflects a required feature or characteristic. Requirements that do not specify a threshold or objective are, by default, threshold requirements. To reiterate – with respect to the MVSS program, these requirements are a framework for evaluating and selecting among NDI, COTS, or GOTS systems. The actual

procurement will be capability-based, reflecting appropriate tradeoffs among performance, cost and schedule. As indicated in Appendix 2, all performance requirements are prioritized and may be deferred to reflect the results of the capability-based procurement, consistent with the terms of this ORD.

3.1 VISIBILITY AND SURVEILLANCE

Traceability to the mission elements and these capabilities is provided in Appendix 2, Table 4. The requirements are applicable during day and night conditions to a FoV/FoR [redacted] as prescribed in Section 4.10, unless otherwise noted.

3.1.1 DETECT AND TRACK

MVSSORD 01 The MVSS shall provide a surveillance range no less than [redacted] (O).

[redacted]

MVSSORD 02 The MVSS shall provide video of sufficient quality and resolution within the required surveillance range that enables the operator to detect the following IoI: [redacted]

Rationale: Border threats in urban, rural and remote areas [redacted]

MVSSORD 03 The MVSS shall provide video of sufficient quality and resolution[12] to enable an operator to detect the presence of a [redacted]

Rationale: This level of performance ensures that USBP will be able to detect the types of threats encountered under typical operating conditions. [redacted]

[12] Sufficient Quality and Resolution - An accurate reproduction of the scene captured by the imaging device that does not contain noticeable distortion, degradation, noise or artifacts

[13] Typical LoS conditions vary from full LoS of IoIs, t[redacted] Typical LoS conditions are further quantified in the Functional Requirements Document (FRD).

MVSSORD 04 The MVSS shall provide an operato(b) (7)(E) y s .

Rationale: (b) (7)(E) S ,

MVSSORD 05 The MVSS shall provid(b) (7)(E) throughout the FoR.

Rationale: (b) (7)(E) s .

MVSSORD 06 The MVSS shall provide an operato(b) (7)(E) y .

Rationale: (b) (7)(E) e s t .

3.1.2 IDENTIFICATION AND CLASSIFICATION

MVSSORD 07 The MVSS shall provide video within the required range of sufficient quality and resolution to enable an operator to(b) (7)(E) , .

Rationale: IoI identification is critical to planning a response and agent safety. As a result, the video provided by the system must be of sufficient quality to enable the MVSS operator to identify IoIs as accurately as possible.

MVSSORD 08 The MVSS shall provide video of sufficient quality and resolution to enable an operator to identify that a(b) (7)(E) s **(KPP)**

Rationale: Identifying the IoI within the video scene is a critical task conducted by the operator using the video provided by the system so the video must be of sufficient quality to do so. A(b) (7)(E) of .

MVSSORD 09 The MVSS shall provide video within the required surveillance range of sufficient quality and resolution to enable an operator to (b) (7)(E)

(b) (7)(E)

MVSSORD 10 The system shall provide video of sufficient quality and resolution to enable an operator to determine whether an IoI is (b) (7)(E)

Rationale: (b) (7)(E)

3.2 COMMAND, CONTROL, COMMUNICATIONS, COORDINATION AND INTELLIGENCE

3.2.1 SYSTEM COMMAND AND CONTROL

MVSSORD 11 The MVSS shall provide the operator with near real-time control of system functions.

Rationale: The MVSS operator requires the ability to (b) (7)(E)

3.2.2 COMMUNICATIONS

MVSSORD 12 The MVSS shall provide provisions to (b) (7)(E)

Rationale: (b) (7)(E) *This will extend the range of operations and utility of the MVSS.*

3.2.3 OPERATOR INTERFACE AND TOOLS

MVSSORD 13 The MVSS shall enable the operator to (b) (7)(E)

Rationale: (b) (7)(E)

(b) (7)(E)

MVSSORD 14 The MVSS shall have (b) (7)(E)

Rationale: The operator will be required to use the (b) (7)(E)

MVSSORD 15 The MVSS shall enable the operator t(b) (7)(E)

Rationale: (b) (7)(E)

MVSSORD 16 The MVSS shall enable individual operator selection, de-selection, and customization of tools and aids individually.

Rationale: Operator customization enhances operational efficiency through the ability to control the tools (b) (7)(E)

3.2.4 RESPONSE AND SUPPORT

MVSSORD 17 (b) (7)(E)

Rationale: This ability ensures responding agents can quickly locate the threat for interdiction. The accuracy requirement depends largely upon the surrounding terrain. (b) (7)(E)

MVSSORD 18 The MVSS shall provide the capability for the operator t(b) (7)(E)

Rationale: (b) (7)(E)

3.2.5 PREDICT (INTELLIGENCE) AND RESOLVE (REPORTING)

MVSSORD 19 The MVSS shall continuously timestamp, record, and store all MVSS video (at the same quality and resolution as provided to the operator) and associated

metadata (b) (7)(E)) for a minimum of (b) (7)(E)).

Rationale: Data storage is required to support (b) (7)(E) *reporting requirements, information sharing at shift changes, training, and post-event activities that include forensic analysis, data/trend analysis, and law enforcement/judicial process.*

MVSSORD 20 The MVSS shall enable the operator to (b) (7)(E) .

Rationale: (b) (7)(E) .

MVSSORD 21 The MVSS shall enable the operator to retrieve and view stored video, individual frames, and associated metadata on the display immediately upon operator request.

Rationale: Data retrieval and the ability to study individual frames for detail enhances MVSS operator IoI identification and classification, facilitates operator data requests, last known IoI location, and on-the-job training..

MVSSORD 22 The MVSS shall enable only USBP-authorized personnel to extract and export stored video, individual frames, and associated metadata in formats compatible with CBP computer resources.

Rationale: Data retrieval and analysis during and/or after missions/events by authorized users will enhance IoI investigations; facilitate operator data requests; and follow-on law enforcement activities such as trend analysis and legal court proceedings.

4 SUITABILITY REQUIREMENTS

The following requirements describe the basic attributes for MVSS system sustainment and support capabilities. To reiterate – with respect to the MVSS program, these requirements are a framework for evaluating and selecting between NDI, COTS, or GOTS systems. The actual procurement will be "capability based" reflecting appropriate tradeoffs among performance, cost, and schedule. All performance requirements are prioritized and may be deferred to reflect the results of the capability-based procurement, consistent with the terms of this ORD.

4.1 DESIGN

MVSSORD 23 The MVSS shall not interfere with or degrade the operation of other CBP equipment.

Rationale: (b) (7)(E) .

The MVSS should not produce conditions that interfere with other CBP

[14] Tag - A label assigned to identify and locate data in memory.

equipment;(b) (7)(E)

MVSSORD 24 The MVSS shall have (b) (7)(E) l (b) (7)(E) .

Rationale: (b) (7)(E)

MVSSORD 25 The MVS(b) (7)(E) t

Rationale: (b) (7)(E) e .

4.2 INTEROPERABILITY

MVSSORD 26 The MVSS shall be interoperable with the current USBP fleet of 4x4 truck bed sizes: standard bed size (T), short bed size (O). (KPP)

Rationale: USBP requires the ability to transfer the systems between USBP 4x4 truck beds without exceeding the vehicle's specifications, such as length, width, weight, and center of gravity limits. Because the USBP fleet of trucks will change over time, the system should be designed to accommodate the most critical specifications of existing 4x4 vehicles.

MVSSORD 27 The USBP vehicle shall(b) (7)(E) e .

Rationale: (b) (7)(E)

4.3 MOBILITY/TRANSPORTABILITY

MVSSORD 28 The MVSS shall be capable of transitioning from a transport state to a mission-ready state within (b) (7)(E)) of arriving on site (b) (7)(E) .

Rationale: The concept of operations is for the(b) (7)(E) r a *The concept of operations also includes the need to move*

mission-ready state. The concept of operations also includes the need to (b) (7)(E) *, so the system must also be capable of achieving a mission-ready state (to include elevation of the surveillance subsystem) from an initialized condition in a timely manner.*

MVSSORD 29 The MVSS shall be capable of transitioning from a mission-ready state to a transport-ready state within (b) (7)(E) (b) (7)(E) .

Rationale: The MVSS concept of operations requires the capability for the operator to relocate the MVSS to different surveillance sites during operations. (b) (7)(E)

MVSSORD 30 The MVSS shall be capable of bein (b) (7)(E) .

Rationale: (b) (7)(E)

MVSSORD 31 The MVSS shall b (b) (7)(E) .

Rationale: (b) (7)(E)

4.4 AVAILABILITY

MVSSORD 32 The system shall have a materiel availability (A_m) equal to or greater than (b) (7)(E) , where A_m is defined as system uptime divided by the sum of system uptime and system downtime. (KPP)

Rationale: The MVSS will be limited in number so availability must be high. System uptime consists of any operating time when the system is fully or partially capable of performing an assigned mission in accordance with the operational requirements at any given time. Downtime includes operational time with any failure condition that precludes the detection or tracking of an IoI within the system's FoR (under conditions the system would otherwise be capable of performing), or the communication/display of this information to the operator in the cab of the vehicle.

4.5 MAINTAINABILITY

MVSSORD 33 The MVSS sha (b) (7)(E) .

Rationale: (b) (7)(E)

4.6 SUPPORTABILITY AND SUSTAINMENT (INTEGRATED LOGISTICS SUPPORT)

MVSSORD 34 The MVSS shall be capable o(b) (7)(E) using readily available lift equipment at the fleet maintenance facility within (b) (7)(E).

Rationale: The number of personnel required to transfer the system should be minimized given station resource limitations. The concept of support is to use a forklift to move the MVSS between trucks in the maintenance facility which (b) (7)(E) *. The transfer in the maintenance facility should be expedient to minimize down-time and maximize operational availability.*

MVSSORD 35 System Integrated Logistics Support shall provide the means to assess KPPs over the life of the system.

Rationale: Operations and maintenance over time can degrade system performance. The extent of any performance degradation must be documented in order to assess the impact on the mission and to plan operational mitigations accordingly.

MVSSORD 36 The MVSS installation shall not void the vehicle's warranty.

USBP requires that the manufacturer's warranty remain in effect throughout the warranty period. Any modifications cannot exceed vehicle specifications such as weight and center of gravity limits. The modification must also ensure the system is (b) (7)(E) *Acceptable modifications will consist of items such as* (b) (7)(E) *Major modifications, as specified in each vehicles specification, are unacceptable.*

4.7 SECURITY

MVSSORD 37 The MVSS shall be protected against unauthorized access to the system and its data in accordance with applicable DHS and CBP policies and procedures.

Rationale: Collected imagery and surveillance subsystem command and control needs to be protected against unintentional disclosure and criminal intrusion (b) (7)(E).

4.8 SAFETY

MVSSORD 38 The MVSS shall be safe to operate and maintain as required by applicable Occupational Safety and Health Administration (OSHA) standards and CBP policies and procedures.

Rationale: DHS Management Directive (MD) 5200.1 establishes DHS policy regarding occupational safety and health programs.

4.9 HUMAN FACTORS/ HUMAN MACHINE INTERFACE

MVSSORD 39 The system shall use Human Systems Integration [15](HSI) principles to avoid operator fatigue.

Rationale: (b) (7)(E)

4.10 ENVIRONMENTAL CONSIDERATIONS

MVSSORD 40 The MVSS shall be capable of operating in urban, rural, and remote environments.

Rationale: USBP is responsible for maintaining surveillance throughout the Southwest border areas which include urban/suburban, rural (ranging from farmland to densely vegetated terrain), and remote (ranging from level plains with low vegetation to rugged mountainous areas). While the deployed location of an MVSS will (b) (7)(E) *the system must be capable of operations across the range of environments. Typical environments are described in detail in the SBI Design Reference Mission.*

MVSSORD 41 The MVSS shall b (b) (7)(E) along the United States Southwest border, including extreme temperatures, high salt air conditions, dirt and fine dust conditions, humidity, rain, fog, snow, icing, high winds, sand storms, and electrical storms.

Rationale: The system must support USBP operations, which continue throughout the year under varying and extreme environmental conditions. While some performance degradation is unavoidable under certain weather extremes, the system must be capable of surviving those conditions without being removed from the field or requiring special safeguards. Applicable environments are described in detail in the SBI Design Reference Mission.

MVSSORD 42 The MVSS shall operate in typical wind, humidity, and temperature ranges for the deployed area.

[15] Human Systems Integration: The interdisciplinary technical and management processes for integrating human considerations within and across all system elements; an essential enabler to systems engineering practice.

Rationale: High winds and extreme temperatures are commonly found along the border; as such, the system must be capable of conducting its assigned mission functions under expected operating conditions. Typical environments are described in detail in the SBI Design Reference Mission.

4.11 TRAINING REQUIREMENTS

MVSSORD 43 MVSS operation shall not require skill sets beyond those required for USBP agents.

Rationale: USBP must be able to use existing work force to operate the system and currently has no plans to create a new occupational specialty for this position; a need to recruit and hire individuals with a different skill set can have substantial personnel implementation and cost impacts.

5 KEY PERFORMANCE PARAMETER SUMMARY

Table 2 Key Performance Parameters

Parameter	Threshold	Objective
Detection Range: **MVSSORD 03: The MVSS shall provide video of sufficient quality and resolution to enable an operator to detect the presence of a** (b) (7)(E) **(KPP)**	(b) (7)(E)	
Identification Range: **MVSSORD 08: The MVSS shall provide video of sufficient quality and resolution to enable an operator to identify that a** (b) (7)(E)	(b) (7)(E)	
Interoperability **MVSSORD 26: The MVSS shall be interoperable with the current USBP fleet of 4x4 truck bed sizes: standard bed size (T), short bed size (O).**	Current fleet of 4x4 standard bed trucks	Current fleet of 4x4 short bed trucks
Availability **MVSSORD 32: The system shall have materiel availability (A_m) equal to or greater than** (b) (7)(E), **, where A_m is defined as system uptime divided by the sum of system uptime and system downtime.**	(b) (7)(E)	

6 GLOSSARY

AoC (Area of Coverage) - The resulting area, considering installation location, view shed and LoS obstructions, etc., within which USBP can successfully conduct surveillance activities using the system, or a combination of systems.

AoI (Area of Interest) – A targeted area within a USBP Station's AoR that requires surveillance due to the risk level associated with the border threat exploitation.

C4I (Command, Control, Communication, Coordination and Intelligence Capability) - The ability to collect and analyze information, exchange information and intelligence, allocate and control resources according to operational needs, and make informed operational command decisions in support of the mission.

FoR (Field of Regard) – FoR is the total angular area through which (b) (7)(E) can direct its field of view.

FoV (Field of View) – FoV is the horizontal and vertical angles visible by or through (b) (7)(E) at any specific instant.

HSI (Human Systems Integration) – The interdisciplinary technical and management processes for integrating human considerations within and across all system elements; an essential enabler to systems engineering practice.

IoI (Item of Interest) – I(b) (7)(E)

(b) (7)(E)

Line Replaceable Unit (LRU) – LRU is a component of a system or subsystem which is capable of being removed and replaced at the field level.

Near Real-Time (NRT) – A low-latency delay of approximately (b) (7)(E) s.

Operational Readiness Rate – is the percentage of time that a system is operationally capable of performing an assigned mission. Operational Readiness equals the number of operational units/the total number of units.

Sufficient quality and resolution - An accurate reproduction of the scene captured by the imaging device that does not contain noticeable distortion, degradation, noise or artifacts. This is applicable to all MVSS units.

Tag - A label assigned to identify and locate data in memory.

Visibility and Surveillance - The ability to detect, track, identify and classify border incursions 24 hours a day, 7 days a week, and 365 days a year in all weather, vegetation, terrain, and lighting conditions.

7 ACRONYMS

A_m	Materiel Availability
AoA	Analysis of Alternatives
AoC	Area of Coverage
AoI	Area of Interest
AoR	Area of Responsibility
ATP	Arizona Border Surveillance Technology Plan
ATV	All Terrain Vehicle
BPA	Border Patrol Agent
CBP	Customs and Border Protection
C4I	Command, Control, Communications, Coordination and Intelligence
COTS	Commercial Off-The-Shelf
DHS	Department of Homeland Security
EO/IR	Electro-Optical/Infrared
FOC	Full Operational Capability
FoR	Field of Regard
FOS	Field Operations Supervisor
FoV	Field of View
FY	Fiscal Year
Lat/Long	Latitude/ Longitude
GOTS	Government Off-The-Shelf
HSI	Human System Integration
IFT	Integrated Fixed Towers
IOC	Initial Operational Capability
IoI	Item(s) of Interest
KPP	Key Performance Parameter
LMR	Land Mobile Radio
LoS	Line-of-Sight
LRU	Line Replaceable Unit
MFR	Memorandum for Record

MNS	Mission Need Statement
MSS	Mobile Surveillance System
MVSS	Mobile Video Surveillance System
NDI	Non-Developmental Item
(b) (7)(E)	
(O)	Objective Requirement
OIT	Office of Information and Technology
ORD	Operational Requirements Document
OSHA	Occupational Safety and Health Administration
POE	Port(s) of Entry
QHSR	Quadrennial Homeland Security Review Report
RVSS	Remote Video Surveillance System
SBI	Secure Border Initiative
SBInet	Secure Border Initiative Network
(T)	Threshold Requirement
T3	Train-the-Trainer
U.S.	United States
USBP	United States Border Patrol

APPENDIX 1: REFERENCES

Government Documents

The government documents listed in Table 3 support the MVSS program acquisition and were referenced in the Operational Requirements Document.

Table 3 Government Documents

Document Number	Document Title	Date
N/A	Arizona Border Surveillance Technology Deployment Plan	July 2010
OTIA05-ATP-00-000001	Arizona Border Surveillance Technology Plan Concept of Operations Document, Initial Release	February 15, 2012
N/A	SBI*net* Mission Need Statement (MNS), Version 1.0	October 1, 2006
N/A	Secure Border Initiative (SBI) Design Reference Mission (DRM) – Great Lakes and Southwest Border, Office of Border Patrol Sectors, Version 1.0	May 2010
N/A	U.S. Customs and Border Protection Fiscal Year 2009-2014 Strategic Plan	July 2009
N/A	CBP's Missions, Goals, and Priorities, FY2011-2013	March 24, 2011
DHS MD 5200.1	Department of Homeland Security Occupational Safety and Health Programs	
N/A	Depart of Homeland Security Quadrennial Homeland Security Review Report	February 2010
DHS AD 102-01	DHS Acquisition Management Directive	January 20, 2010

APPENDIX 2: REQUIREMENTS TRACEABILITY MATRIX

Table 4 shows the traceability between the operational requirements and the applicable capability. To facilitate cost-effectiveness and schedule trade-offs, the requirements have been prioritized as follows:

- Priority 1 (KPP): Deviation below the threshold requires approval in accordance with DHS Acquisition Management Directive 102-01
- Priority 2: Deviation below the threshold requires USBP endorsement
- Priority 3: Deviation below the threshold requires USBP endorsement

Once the trade-off analysis is complete and the IOC/FOC capability has been finalized, the Program Manager, through the Component Acquisition Executive, will submit a formal Memorandum for Record (MFR) to USBP recommending approval. The MFR will request the endorsement of and provide notification of the operational requirement(s) deviations for the acquisition.

Table 4 Operational Requirements Summary

Rqmt ID	Operational Requirement	Mission Element	Capability	Priority
MVSSORD 01	The MVSS shall provide a surveillance range no less than (b) (7)(E).	Detect, Track, Identify, Classify	Visibility and Surveillance	2
MVSSORD 02	The MVSS shall provide video of sufficient quality and resolution within the required surveillance range that enables the operator to detect the following IoI; (b) (7)(E)).	Detect	Visibility and Surveillance	2
MVSSORD 03	The MVSS shall provide video of sufficient quality and resolution to enable an operator to detect the presence of a (b) (7)(E) (KPP)	Detect	Visibility and Surveillance	1
MVSSORD 04	The MVSS shall provide an operator option for the system to (b) (7)(E)	Track	C4I	3
MVSSORD 05	The MVSS shall provide uninterrupted video of IoIs throughout the FoR.	Detect, Track, Identify, Classify	Visibility and Surveillance	2

[16] Typical LoS conditions vary (b) (7)(E). Typical LoS conditions are further quantified in the Functional Requirements Document (FRD).

Rqmt ID	Operational Requirement	Mission Element	Capability	Priority
MVSSORD 06	The MVSS shall provide an operator (b) (7)(E) .	Detect, Track, Identify, Classify	Visibility and Surveillance	3
MVSSORD 07	The MVSS shall provide video within the required range of sufficient quality and resolution to enable an operator to determine whether the IoI is (b) (7)(E) .	Identify	Visibility and Surveillance	2
MVSSORD 08	The MVSS shall provide video of sufficient quality and resolution to enable an operator to identify that a (b) (7)(E) (KPP)	Identify	Visibility and Surveillance	1
MVSSORD 09	The MVSS shall provide video within the required surveillance range of sufficient quality and resolution to enable an operator to determine IoI (b) (7)(E)	Classify	Visibility and Surveillance	2
MVSSORD 10	The system shall provide video of sufficient quality and resolution to enable an operator to determine whether an IoI (b) (7)(E) (b) (7)(E) .	Classify Identify	Visibility and Surveillance	2
MVSSORD 11	The MVSS shall provide the operator with near real-time control of system functions.	Detect, Track, Identify, Classify, Respond	C4I	2
MVSSORD 12	The MVSS shall provide (b) (7)(E) .	Respond	C4I	3
MVSSORD 13	The MVSS shall enable the operator to define a minimum of (b) (7)(E) (b) (7)(E) .	Detect, Track	C4I	2
MVSSORD 14	The MVSS shall have a display and control (b) (7)(E)	Detect, Track, Identify, Classify	C4I	2
MVSSORD 15	The MVSS shall enable the operator to (b) (7)(E) .	Detect, Track, Identify, Classify	C4I	2

Rqmt ID	Operational Requirement	Mission Element	Capability	Priority
MVSSORD 16	The MVSS shall enable individual operator selection, de-selection, and customization of tools and aids individually.	Detect, Track, Identify, Classify, Respond	C4I	2
MVSSORD 17	The system shall (b) (7)(E)	Respond	C4I	2
MVSSORD 18	The MVSS shall provide the capability for the operator to (b) (7)(E)	Respond	C4I	2
MVSSORD 19	The MVSS shall continuously timestamp, record, and store all MVSS video (at the same quality and resolution as provided to the operator) and associated metadata (b) (7)(E) .) for a minimum of (b) (7)(E)	Predict, Resolve	C4I	2
MVSSORD 20	The MVSS shall enable the operator to (b) (7)(E) to support operations and post-event analysis.	Resolve	C4I	3
MVSSORD 21	The MVSS shall enable the operator to retrieve and view stored video, individual frames, and associated metadata on the display immediately upon operator request.	Predict, Resolve	C4I	2
MVSSORD 22	The MVSS shall enable only USBP-authorized personnel to extract and export stored video, individual frames, and associated metadata in formats compatible with CBP computer resources.	Predict, Resolve	C4I	2
MVSSORD 23	The MVSS shall not interfere with or degrade the operation of other CBP equipment.	All	N/A	2
MVSSORD 24	The MVSS shall have a (b) (7)(E) (b) (7)(E)	All	Visibility and Surveillance, Support and Sustainment	2
MVSSORD 25	The MVSS (b) (7)(E)	All	Visibility and Surveillance, Support and Sustainment	2
MVSSORD 26	The MVSS shall be interoperable with the current USBP fleet of 4x4 truck bed sizes: standard bed size (T), short bed size (O). KPP	All	Visibility and Surveillance Support and Sustainment	1
MVSSORD 27	The USBP vehicle shall (b) (7)(E)	All	Support and Sustainment	2
MVSSORD 28	The MVSS shall be capable of transitioning from a transport state to a mission-ready state (b) (7)(E)	All	Visibility and Surveillance	2

Rqmt ID	Operational Requirement	Mission Element	Capability	Priority
	(b) (7)(E)) of arriving on site(b) (7)(E)t .			
MVSSORD 29	The MVSS shall be capable of transitioning from a mission-ready state to a transport-ready state within(b) (7)(E) (b) (7)(E) (b) (7)(E) r .	All	Visibility and Surveillance	2
MVSSORD 30	The MVSS shall be(b) (7)(E) .	All	Visibility and Surveillance	2
MVSSORD 31	The MVSS shall be(b) (7)(E) .	All	Visibility and Surveillance	2
MVSSORD 32	The system shall have materiel availability (A_m) equal to or greater than (b) (7)(E) , where A_m is defined as system uptime divided by the sum of system uptime and system downtime. (KPP)	All	Visibility and Surveillance, Support and Sustainment	1
MVSSORD 33	The MVSS shall(b) (7)(E)).	All	Support and Sustainment	2
MVSSORD 34	The MVSS shall be capable of being transferred between vehicles with no more than(b) (7)(E) O).	All	Support and Sustainment	2
MVSSORD 35	System Integrated Logistics Support shall provide the means to assess KPPs over the life of the system.	All	Visibility and Surveillance, Support and Sustainment	2
MVSSORD 36	The MVSS installation shall not void the vehicle's warranty.	All	Support and Sustainment	2
MVSSORD 37	The MVSS shall be protected against unauthorized access to the system and its data in accordance with applicable DHS and CBP policies and procedures.	All	Visibility and Surveillance	2
MVSSORD 38	The MVSS shall be safe to operate and maintain as required by applicable Occupational Safety and Health Administration (OSHA) standards and CBP policies and procedures.	All	Visibility and Surveillance	2
MVSSORD 39	The system shall use Human System Integration principles to avoid operator fatigue.	All	Visibility and Surveillance	2
MVSSORD 40	The MVSS shall be capable of operating in urban, rural, and remote environments.	All	Visibility and Surveillance	2
MVSSORD 41	The MVSS shall be(b) (7)(E) o survive in all climatic conditions encountered along the United	All	Visibility and Surveillance	2

Rqmt ID	Operational Requirement	Mission Element	Capability	Priority
	States Southwest border, including extreme temperatures, high salt air conditions, dirt and fine dust conditions, humidity, rain, fog, snow, icing, high winds, sand storms, and electrical storms.			
MVSSORD 42	The MVSS shall operate in typical wind, humidity, and temperature ranges for the deployed area.	All	Visibility and Surveillance	2
MVSSORD 43	MVSS operation shall not require skill sets beyond those required for USBP agents.	All	Visibility and Surveillance	2